CLINICAL RADIOLOGY ASSESSMENT SYSTEM BLUEPRINT - INDEX AND KEY

KEY TO ABBREVIATIONS

DOPS	Direct Observation of Procedural Skills
CbD	Case-based Discussion
Mini-CEX	Clinical Evaluation Exercise
DADRS	Direct Assessment of Diagnostic Radiology Skills
MSF	Multi-Source Feedback
MCQ	Multiple Choice Questions
PQ	Patient questionnaire

A range of workplace assessments will be undertaken each year. The detail of which, when and how many will be refined, trialled and validated with a view to providing an indicative assessment framework for each stage of training.

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
	ST1 (first year)	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate knowledge of basic radiation physics and radiation safety to the level of the First FRCR examination							X				
	Demonstrate familiarity with the concepts and terminology of diagnostic and interventional radiology	X	X									
	Demonstrate an understanding of the role and usefulness of the various diagnostic and interventional techniques in all age groups		X									
	Demonstrate an understanding of the responsibilities of a radiologist to the patient, including the legal framework and necessity for informed consent		X			X	X					
	Demonstrate knowledge of the various contrast media, drugs (including intravenous sedation) and monitoring used in day to day radiological practice, and an awareness of indications, contraindications, doses (adult and paediatric) and the management of reactions and complications	X	X									
	Demonstrate an understanding of the principles of radiation protection and familiarity with the legal framework for protection against ionising radiation		X					X				
	Demonstrate an understanding of the safety requirements for radionuclide radiology and imaging with non-ionising radiation (e.g. ultrasound and MRI)	X	X									

	ST1 (first year)	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Demonstrate a sound understanding of basic radiological and radiographic procedures	X	X									
	Demonstrate knowledge and practice of clinical audit and risk management						X					
	Demonstrate knowledge of the relevant issues in the GMC guide to 'Good Medical Practice'					X	X					
Core Skills	Demonstrate competence in cardiopulmonary resuscitation	X										
	Demonstrate safe radiological practice	X			X		X					
	Interpretation and formal reporting of the following:											
	- all core procedures and techniques performed by the trainee	X	X	X								
	- a selection of radiographs performed for trauma		X		X							
	- a selection of in-patient and out-patient radiographs		X		X							

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
	GENERIC TRAINING (general development)	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate knowledge of the legal and ethical framework within which radiology and general healthcare provision operate		X			X	X					
	Keep abreast of developments in information management relevant to radiology departments		X									
	Understand the principles and practice of evidence based medicine		X				X					
	Understand how clinical information is used in Clinical Governance.		X				X					
Core skills	Demonstrate the ability to communicate effectively including breaking bad news			X		X	X					X
	Demonstrate the ability to keep abreast of current trends and recent advances in clinical radiology		X				X					
	Demonstrate a skill using different instructional methods such as teaching, lecturing, small group facilitation and practical instruction	X					X					
	Develop and present an instructional session	X					X					
Core skills	Design and follow through an audit project (include details in section C)		X									
	Take part in regular critical film review				X							
	Critically read and appraise published material using appropriate libraries		X									
	Use information technology within the library services and the Web to search for radiological and other medical literature		X									

	GENERIC TRAINING (general development)	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Demonstrate an understanding of the principles, theory and practice of medical research including research design and the interpretation of research data		X				X					
	Develop core skills in information technology, especially the ability to perform basic word-processing, and to access computerised medical databases, electronic mail systems and the internet		X				X					
	Strive for best practice in patient record keeping and the transfer of clinical data and images		X				X					
Core skills	Comply with the Acts and Directives concerning Data Protection in clinical practice, and when using patient data for research, audit or teaching		X				X					

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**BREAST RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of breast pathology and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate understanding of the radiographic techniques employed in diagnostic mammography		X						X			
	Demonstrate understanding of the principles of current practice in breast imaging and breast cancer screening		X						X			X
	Demonstrate an awareness of the proper application of other imaging techniques to this specialty (e.g. ultrasound, magnetic resonance imaging and radionuclide radiology)		X						X			X
Core skills	Reporting of mammograms demonstrating common breast disease		X		X					X		X
	Participation in mammographic reporting sessions (screening and symptomatic)		X									
	Performing ultrasound of the breast	X				X						
	Participation in breast assessment clinics			X		X						
	Participating in multidisciplinary breast meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**BREAST RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy and physiology of the breast		X		X							
	The pathology of the breast in benign and malignant conditions		X		X							
	The epidemiology of breast cancer		X									
	The principles of population screening for breast cancer		X									
	The principles of mammographic technique and factors affecting quality		X									
	The technique of breast ultrasound and factors affecting quality		X	X	X							
	The technique of scintimammography and sentinel node imaging		X		X							
	Magnetic resonance imaging of the breast		X		X							
	Digital imaging of the breast and factors affecting image quality		X		X							
	The indications, contraindications and complications of each imaging method		X									
	The principles of informed consent			X		X	X					
	The role of multidisciplinary meetings in the management of breast disease		X									
	The organisation of breast cancer services		X									
	Local, national and international imaging guidelines		X									

ADVANCED TRAINING	**BREAST RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Skills	Accurate mammographic interpretation			X	X							
	The use of ultrasound in diagnosing breast diseases	X		X	X							
	The use of radionuclide imaging in diagnosing and staging breast diseases		X	X	X							
	The use of magnetic resonance imaging in breast diseases		X	X	X							
	Cyst aspiration	X				X	X					
	Ultrasound guided:											
	fine needle aspiration cytology	X				X	X					
	localisation	X				X	X					
	core biopsy	X				X	X					
	Stereotactic guided:											
	fine needle aspiration cytology	X				X	X					
	localisation	X				X	X					
	core biopsy	X				X	X					
	Mammographic guided localisation for biopsy and treatment	X				X	X					
	Ultrasound guided localisation for biopsy and treatment	X				X	X					
	Mammographic surgical specimen localisation	X										
	The conduct and supervision of breast imaging in assessment clinics		X	X		X	X					
	The conduct of multidisciplinary meetings for breast diseases		X				X					
	Obtaining accurate informed consent	X		X		X	X					
	Intermediate life support qualification	X										

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**CARDIAC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of cardiac anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the manifestations of cardiac disease demonstrated by conventional radiography		X		X				X	X		X
	Demonstrate familiarity with the application of the following techniques:											
	- echocardiography (including transoesophageal)	X		X	X				X	X		X
	- radionuclide investigations		X	X	X				X	X		X
	- computed tomography		X	X	X				X	X		X
	- magnetic resonance imaging		X	X	XX				X	X		X
	- angiography, including coronary angiography	X			X				X	X		X
Core skills	Reporting of plain radiographs performed to show cardiac disease and postoperative appearances		X		X					X	X	X
	Reporting of common and relevant cardiac conditions demonstrated by:											
	- ultrasound	X		X	X					X		X
	- computed tomography		X		X					X		X
	- magnetic resonance imaging		X		X					X		X

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**CARDIAC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and physiology of the cardiovascular system		X		X							
	The epidemiology of cardiac diseases		X									
	The pathological processes of benign and malignant processes involving the cardiovascular system		X		X							
	The techniques of cardiac imaging using:											
	plain films				X							
	ultrasound/echocardiography	X		X	X							
	CT and CT angiography				X							
	MR and MR angiography				X							
	invasive angiography	X			X							
	radionuclide radiology				X							
	The indications, contraindications and complications of each imaging method		X				X					
	The principles of informed consent			X		X	X					
	The role of multidisciplinary meetings in the management of cardiac disease		X									
	Local, national and international imaging guidelines		X									
Skills	The conduct, supervision and interpretation of the following imaging techniques to a high professional standard:											
	plain radiography				X		X					
	cardiac ultrasound and Doppler echocardiography	X			X							

ADVANCED TRAINING	**CARDIAC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	computed tomography		X		X							
	magnetic resonance imaging		X		X							
	coronary angiography	X			X							
	radionuclide radiology		X		X							
	Advanced life support qualification	X										
	Obtaining accurate informed consent			X		X	X					
	The practice of safe and effective interventional techniques	X	X				X					

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of gastrointestinal and biliary anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the radiological manifestations of disease within the abdomen demonstrated by:											
	- conventional radiography		X		X				X	X	X	X
	- contrast studies (including ERCP)	X			X				X	X		X
	- ultrasound	X		X	X				X	X		X
	- computed tomography		X		X				X	X		X
	- magnetic resonance imaging		X		X				X	X		X
	- radionuclide investigations		X		X				X	X		X
	- angiography	X			X				X	X		X
	Demonstrate adequate knowledge of the applications, contraindications and complications of relevant interventional procedures											
Core skills	Reporting plain radiographs performed to show gastrointestinal disease		X		X					X	X	X
	Performing and reporting the following contrast examinations:											
	- swallow and meal examinations	X			X					X		X
	- small bowel studies	X			X					X		X
	- enema examinations	X			X					X		X

CORE TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Performing and reporting transabdominal ultrasound of the gastrointestinal system and abdominal viscera	X		X	X					X		X
	Supervising and reporting:											
	- computed tomography of the abdomen		X		X					X		X
	- CT colonography		X		X					X		X
	Supervising and reporting MRI investigations of the abdomen		X		X					X		X
	Performing:											
	- ultrasound-guided biopsy and drainage	X	X			X	X					X
	- CT-guided biopsy and drainage	X	X			X	X					X
Core Experience	Participation in clinicoradiological/ multidisciplinary meetings		X				X					
	Experience of the following contrast medium studies:											
	- sinogram		X		X					X		X
	- stomagram		X		X					X		X
	- GI video studies		X		X					X		X
	Experience of the current application of radionuclide investigations in the following areas:											
	- liver		X		X					X		X
	- biliary system		X		X					X		X
	- gastrointestinal bleeding (including Meckel's diverticulum)		X		X					X		X
	- abscess localization		X		X					X		X

CORE TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	- assessment of inflammatory bowel disease		X		X					X		X
	Experience of the application of angiography and vascular interventional techniques to this subspecialty		X		X					X		X
	Experience of the relevant application of percutaneous biliary procedures		X		X					X		X

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to GI and hepatobiliary function		X	X	X							
	The pathology of benign and malignant conditions of :											
	the gastrointestinal system		X		X							
	the hepatobiliary system		X		X							
	the pancreas		X		X							
	The epidemiology of GI, hepatobiliary and pancreatic diseases		X									
	The principles of population screening for colorectal cancer		X									
	The techniques of GI, hepatobiliary and pancreatic imaging using:											
	plain films		X		X							
	ultrasound	X		X	X							
	CT		X		X							
	MR		X		X							
	contrast studies	X			X							
	angiography	X			X							
	radionuclide radiology		X		X							
	The indications, contraindications and complications of each imaging method		X			X	X					
	The principles of informed consent		X			X	X					

ADVANCED TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	The role of multidisciplinary meetings in the management of GI, hepatobiliary and pancreatic disease		X									
	Local, national and international imaging guidelines		X									
Skills	The conduct, supervision and interpretation of the following imaging techniques to a high professional standard:											
	plain radiography and fluoroscopic contrast studies including;											
	- primary care examinations	X			X							
	- intubations techniques for small bowel studies	X			X							
	- intensive care and high dependency unit examinations	X			X							
	- the acute abdomen and abdominal trauma		X		X							
	- ERCP	X			X							
	- intra-operative examinations	X			X							
	- proctography and related studies	X			X							
	ultrasound	X		X	X							
	CT		X		X							
	MRI		X		X							
	Accurate localisation and biopsy of masses including:											
	hepatic masses	X				X	X					
	abdominal masses	X				X	X					

ADVANCED TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	pelvic masses	X				X	X					
	lymph node masses	X				X	X					
	The practice of safe and effective interventional techniques including the drainage of:											
	hepatobiliary collections	X				X	X					
	intra-abdominal collections	X				X	X					
	pelvic collections	X				X	X					
	The localisation of the following using radionuclide radiology:											
	GI bleeding		X		X							
	tumours and metastases		X		X							
	Obtaining accurate informed consent		X			X	X					
	Life support qualification	X										
Experience	The use of ultrasound, CT, MRI and radionuclide radiology including the relevant role of each in:											
	the staging of GI and hepatobiliary cancers		X			X						
	the investigation of hepatobiliary and abdominal trauma		X			X						
	other hepatobiliary abnormalities		X			X						
	oesophageal abnormalities		X			X						
	gastric abnormalities		X			X						
	small bowel abnormalities		X			X						
	large bowel abnormalities		X			X						
	pancreatic abnormalities		X			X						

ADVANCED TRAINING	**GI RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	identification and categorisation of diffuse liver disease		X			X						
	staging of pelvic malignancy		X			X						
	pelvic floor disorders		X			X						
	renal and adrenal abnormalities		X			X						

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**HEAD AND NECK/ ENT/DENTAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of head and neck anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the manifestations of ENT/dental disease as demonstrated by conventional radiography, relevant contrast examinations, ultrasound, CT and MRI		X		X				X	X		X
	Demonstrate awareness of the application of ultrasound with particular reference to the thyroid, salivary glands and other neck structures		X		X				X	X		X
	Demonstrate awareness of the application of radionuclide investigations with particular reference to the thyroid and parathyroid glands		X		X				X	X		X
Core skills	Reporting plain radiographs performed to show ENT/dental disease		X		X					X	X	X
	Performing and reporting relevant contrast examinations (e.g. barium studies including video swallows)	X			X					X		X
	Performing and reporting ultrasound of the neck (including the thyroid, parathyroid and salivary glands)	X		X	X					X		X
	Supervising and reporting computed tomography of the head and neck for ENT problems		X		X					X		X

CORE TRAINING	**HEAD AND NECK/ ENT/DENTAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Supervising and reporting computed tomography for orbital problems		X		X					X		X
	Supervising and reporting magnetic resonance imaging of the head and neck for ENT problems		X		X					X		X
	Reporting radionuclide thyroid investigations		X		X					X		X
Core Experience	Participation in clinicoradiological/ multidisciplinary meetings		X				X					

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**HEAD AND NECK RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to head and neck radiology		X		X							
	The pathological processes of both benign and malignant disease in the head and neck region		X		X							
	The techniques of head and neck imaging using:											
	plain films		X		X							
	ultrasound	X		X	X							
	CT		X		X							
	MRI		X		X							
	contrast studies	X			X							
	radionuclide radiology		X		X							
	The indications, contraindications and complications of each imaging method		X									
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of head and neck disease		X				X					
	Local, national and international imaging guidelines		X									
Skills	The conduct, supervision and interpretation of the following imaging techniques to a high professional standard:											

ADVANCED TRAINING	**HEAD AND NECK RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	plain radiography		X		X							
	sialography	X			X							
	dacrocystography	X			X							
	ultrasonography including Doppler studies	X		X	X							
	CT including:											
	the primary diagnosis of benign and malignant lesions		X		X							
	staging of head and neck tumours		X		X							
	detection of skull base and intracranial extension of tumours		X		X							
	MRI including:											
	the primary diagnosis of benign and malignant lesions		X		X							
	staging of head and neck tumours		X		X							
	detection of skull base and intracranial extension of tumours		X		X							
	demonstration of cranial nerve and other intracranial disease resulting in head and neck symptoms		X		X							
	upper GI contrast studies including:											
	contrast medium swallow	X			X							
	videofluorography	X			X							
	radionuclide radiology		X		X							

ADVANCED TRAINING	**HEAD AND NECK RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	The accurate localisation and biopsy of neck masses and lymph nodes	X			X							
	Obtaining accurate informed consent		X			X	X					
	Life support qualification	X										
Experience	Ultrasound guided localisation and biopsy of:					X						
	head and neck masses	X				X						
	lymph node masses in the head and neck region	X				X						
	CT guided localisation and biopsy of:											
	head and neck masses	X				X						
	lymph node masses in the head and neck region	X				X						
	Drainage of head and neck collections	X				X						
	Cannulation and dilatation of salivary gland ducts	X				X						
	Cannulation and dilatation of lacrimal ducts	X				X						

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**MUSCULOSKELETAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of musculoskeletal anatomy and current clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of normal variants of normal anatomy, which may mimic trauma		X						X	X		X
	Demonstrate adequate knowledge of the manifestations of musculoskeletal disease and trauma as demonstrated by conventional radiography, CT, MRI contrast examinations, radionuclide investigations and ultrasound		X		X				X	X		X
Core skills	Reporting plain radiographs relevant to the diagnosis of disorders of the musculoskeletal system including trauma		X		X					X	X	X
	Reporting radionuclide investigations of the musculoskeletal system, particularly skeletal scintigrams		X		X					X		X
	Supervising and reporting computed tomography of the musculoskeletal system		X		X					X		X
	Supervising and reporting magnetic resonance imaging of the musculoskeletal system		X		X					X		X

CORE TRAINING	**MUSCULOSKELETAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Performing and reporting ultrasound of the musculoskeletal system	X		X	X					X		X
	Supervising CT of trauma patients		X		X					X		X
	Supervising MRI of trauma patients		X		X					X		X
Core Experience	Experience of relevant contrast examinations (e.g. arthrography)	X			X					X		X
	Participation in clinicoradiological meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**MUSCULOSKELETAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to musculoskeletal radiology		X		X							
	The pathological processes of both benign and malignant disease in the musculoskeletal system		X		X							
	The techniques of musculoskeletal imaging using:											
	plain film radiography				X							
	ultrasonography	X			X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures including arthrography	X			X							
	The indications, contraindications and complications of each imaging method		X				X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of musculoskeletal disease		X									
	Local, national and international imaging guidelines		X									
Skills	The conduct, supervision and interpretation of the following imaging techniques to a high professional standard:											
	plain radiography including:		X		X							

ADVANCED TRAINING	**MUSCULOSKELETAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	primary care examinations		X		X							
	trauma cases		X		X							
	rheumatological disorders		X		X							
	general and paediatric orthopaedics		X		X							
	ultrasonography including:											
	joints	X		X	X							
	soft tissues	X		X	X							
	orthopaedic and sports injuries	X		X	X							
	where appropriate, Doppler studies	X		X	X							
	computed tomography including:											
	the use of CT for the primary diagnosis of benign and malignant pathology		X		X							
	the staging of tumours involving the musculoskeletal system		X		X							
	the detection of direct extension and metastatic spread of musculoskeletal tumours		X		X							
	the investigation of rheumatological disorders		X		X							
	the investigation of trauma and sports injuries		X		X							
	magnetic resonance including:		X		X							
	the use of MRI for the primary diagnosis of benign and malignant pathology		X		X							
	the staging of tumours involving the musculoskeletal system		X		X							
	the detection of direct extension and metastatic spread of musculoskeletal tumours		X		X							

ADVANCED TRAINING	**MUSCULOSKELETAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	the demonstration of spinal anatomy and pathology		X		X							
	the demonstration of joint anatomy and pathology		X		X							
	the investigation of rheumatological disorders		X		X							
	the investigation of trauma and sports injuries		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures including arthrography	X			X							
	The accurate localisation and biopsy of the following:											
	soft tissue masses	X			X	X						
	bone masses	X			X	X						
	lymph node masses	X			X	X						
	Obtaining accurate informed consent		X			X	X					
	Intermediate life support qualification	X										
Experience	Biopsy of bone lesions	X			X	X						
	Biopsy of soft tissue lesions	X			X	X						
	Image guided diagnostic procedures	X			X	X						
	Image guided therapeutic procedures	X			X	X						
	Facet joint injection	X			X	X						
	Discography	X			X	X						

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**NEURORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of neuroanatomy and clinical practice relevant to neuroradiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the manifestations of central nervous system disease as demonstrated on conventional radiography, CT, MRI and angiography		X		X				X	X		X
	Demonstrate awareness of the applications, contraindications and complications of invasive neuroradiological procedures		X				X		X			X
	Demonstrate familiarity with the application of radionuclide investigations in neuroradiology		X		X				X	X		X
	Demonstrate familiarity with the application of CT and MR angiography in neuroradiology		X		X				X	X		X
Core Skills	Reporting plain radiographs in the investigation of neurological disorders		X		X					X		X
	Supervising and reporting:											
	- cranial computed tomography including trauma		X		X					X		X
	- spinal computed tomography including trauma		X		X					X		X
	Supervising and reporting:											
	- cranial magnetic resonance imaging		X		X					X		X
	- spinal magnetic resonance imaging		X		X					X		X

CORE TRAINING	**NEURORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Experience	Observation and reporting of cerebral angiograms		X		X					X		X
	Observation of carotid ultrasound including Doppler		X		X					X		X
	Experience in the following investigations to image the cerebral vascular system:		X		X					X		X
	- magnetic resonance angiography		X		X					X		X
	- computed tomography angiography		X		X					X		X
	Participation in clinicoradiological/ multidisciplinary meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**NEURORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and physiology of the central and peripheral nervous systems, organs of special sense, head and neck and spine and spinal cord in adults and children		X	X	X							
	The pathological correlation of diseases and variations of the CNS, including the spine and cranium, disorders of the ophthalmological and otorhinolaryngological systems, including applications and interpretation of the various imaging modalities		X		X							
	The physical principles and technical background for the performance of all imaging modalities for diagnostic imaging of the following:											
	the skull and brain		X		X							
	the spine and spinal cord		X		X							
	the neck		X		X							
	the organs of special senses		X		X							
	The full range of currently used diagnostic and therapeutic techniques including:											
	conventional radiography		X		X							
	CT		X		X							
	MRI including:		X		X							
	MR spectroscopy		X		X							

ADVANCED TRAINING	**NEURORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	functional imaging		X		X							
	angiography	X			X							
	ultrasound	X			X							
	myelography	X			X							
	nuclear medicine including:											
	SPECT		X		X							
	PET		X		X							
	currently used interventional techniques	X				X						
	The indications, contraindications, complications and protocols for each method		X				X					
	Pharmacology related to the diagnostic and therapeutic procedures used		X									
	Patient safety and protection		X			X	X					
	Fundamentals of quality assurance in neuroradiology		X				X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of cases		X									
	Local, national and international imaging and interventional neuroradiology guidelines		X									
Skills	The conduct, supervision and interpretation of all imaging techniques to a high professional standard including:											
	diagnostic and interpretive skills		X		X							
	computer skills in imaging acquisition and post-processing		X		X							
	competence in style of reporting		X		X							

ADVANCED TRAINING	**NEURORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	The safe and effective practice of interventional techniques to a high professional standard including:											
	manual and procedural skills	X			X	X	X					
	basic endovascular and therapy skills	X				X						
	ability to make appropriate decisions about terminating a procedure for technical reasons or grounds of safety/comfort of the patient		X				X					
	ability to manage post procedure care for invasive diagnostic and therapeutic techniques, and neuroradiological emergencies		X			X	X					
	Good communication with patients and professional colleagues			X		X	X					
	Obtaining accurate informed consent		X			X	X					
	Advanced life support qualification	X										
	Plain film interpretation including:											
	primary care examinations		X		X							
	skull, facial and spinal trauma		X		X							
	paediatric examinations including NAI		X		X							
	Supervision and reporting of neuroradiological CT lists		X		X							
	Supervision and reporting of neuroradiological MRI lists		X		X							
	Neuroradiological angiography	X			X							
	Neuroradiological intervention	X				X						
	Myelography and radiculography	X			X							
	Attendance at multidisciplinary meetings		X									
	Leading multidisciplinary meetings		X				X					

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**OBSTETRIC AND GYNAECOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of obstetric and gynaecological anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the physiological changes affecting imaging of the female reproductive organs		X		X				X	X		X
	Demonstrate adequate knowledge of the changes in maternal and foetal anatomy during gestation		X		X				X	X		X
	Demonstrate awareness of the applications of angiography and vascular interventional techniques		X						X			X
	Demonstrate awareness of the applications of magnetic resonance imaging in gynaecological disorders and obstetrics		X		X				X			X
Core Skills	Reporting plain radiographs performed to show gynaecological disorders		X		X					X		X
	Performing and reporting the following ultrasound examinations in gynaecological disorders, including possible complications of early pregnancy (e.g. ectopic):											
	- transabdominal	X		X	X					X		X
	- endovaginal	X		X	X					X		X
	Supervising and reporting computed tomography in gynaecological disorders		X		X					X		X

CORE TRAINING	**OBSTETRIC AND GYNAECOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Supervising and reporting magnetic resonance imaging in gynaecological disorders		X		X					X		X
Core Experience	Participation in clinicoradiological meetings		X									
	Participation in multidisciplinary meetings		X									
	Observation of foetal MRI		X		X					X		X
	Observation of angiography and interventional techniques in gynaecological disease		X		X					X		X

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**OBSTETRIC AND GYNAECOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to the female genitourinary system		X	X	X							
	The pathological processes of both benign and malignant disease in the female genitourinary system		X		X							
	The epidemiology of gynaecological diseases		X									
	The techniques of gynaecological imaging including:											
	plain film radiography		X		X							
	ultrasonography	X			X							
	contrast studies and fluoroscopic examinations of the genitourinary tract	X			X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	The indications, contraindications and complications of each imaging method		X			X	X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of gynaecological disease		X									

ADVANCED TRAINING	**OBSTETRIC AND GYNAECOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Local, national and international imaging guidelines		X									
	The medico-legal aspects of obstetric and gynaecological practice		X				X					
Skills	The conduct, supervision and interpretation of the following imaging techniques to a high professional standard:											
	plain radiography		X		X							
	ultrasound studies of the abdomen and pelvis including:											
	transvaginal techniques	X		X	X							
	Doppler studies	X			X							
	contrast studies of the genitourinary tract	X			X							
	fluoroscopic studies of the genitourinary tract	X			X							
	CT for gynaecological disease		X		X							
	MRI for gynaecological disease		X		X							
	The accurate localisation and biopsy of the following:											
	pelvic masses	X				X						
	abdominal masses	X				X						
	lymph node masses	X				X						
	Drainage of abdominal-pelvic abscesses/collections	X				X						
	Percutaneous nephrostomy	X				X						
	Obtaining accurate informed consent		X			X	X					
	Intermediate life support qualification	X										

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**ONCOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of clinical oncological practice relevant to clinical radiology		X	X					X			X
	Demonstrate familiarity with tumour staging nomenclature		X						X			X
	Demonstrate familiarity with the application of ultrasound, radionuclide investigations, computed tomography, and magnetic resonance imaging, angiography and interventional techniques in oncological staging, and monitoring the response of tumours to therapy		X		X					X		X
	Demonstrate familiarity with the radiological manifestations of complications which may occur in tumour management		X		X				X	X		X
Core Skills	Reporting plain radiographs performed to assess tumours		X		X					X		X
	Performing and reporting the following investigations in oncological staging and monitoring the response of tumours to therapy:											
	- ultrasound	X			X							X
	- computed tomography		X		X							X
	- magnetic resonance imaging		X		X							X
	- radionuclide investigations (excluding PET/CT)		X		X							X
	- PET/CT		X		X							X

CORE TRAINING	**ONCOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Performing image-guided biopsy of masses under :											
	- ultrasound guidance	X			X	X						X
	- CT guidance	X			X	X						X
Core Experience	Participation in multidisciplinary meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**ONCOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology of the major tumour bearing organs		X	X	X							
	The various tumour staging methods used for each major organ		X		X							
	Lymph node notation, routes of lymphatic drainage anatomical routes of spread of common tumours		X		X							
	The methods used to analyse tumour response to treatment		X		X							
	The techniques of oncological imaging using:											
	plain film radiography		X		X							
	ultrasonography	X			X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures	X			X							
	The indications, contraindications and complications of each imaging method		X			X	X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of cancer		X									
	Local, national and international imaging guidelines		X									

ADVANCED TRAINING	**ONCOLOGICAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Skills	The conduct, supervision and interpretation of imaging techniques to a high professional standard in the accurate diagnosis and staging of solid tumours of the major organs and metastatic deposits using:											
	plain radiography		X		X							
	ultrasonography	X		X	X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures	X			X							
	The accurate localisation and biopsy of the following using ultrasound, CT and (where available) MRI:											
	soft tissue masses	X				X						
	lymph node masses	X				X						
	The drainage of collections	X				X						
	Obtaining accurate informed consent		X			X	X					
	Intermediate life support qualification	X										
Experience	The role of plain radiography, MRI, CT and nuclear medicine in the evaluation of an equivocal diagnosis of metastases		X		X							
	The indications and use of functional imaging (e.g. thyroid cancer)		X		X							
	The use of tumour specific agents and their application to cancer management		X		X							
	The use of PET and CT PET in cancer management		X		X							
	The complications of cancer management		X		X							
	The use of imaging in therapy planning		X		X							

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**PAEDIATRIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of paediatric anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of disease entities specific to the paediatric age group and their clinical manifestations relevant to clinical radiology		X		X				X	X		X
	Demonstrate adequate knowledge of disease entities specific to the paediatric age group and their manifestations as demonstrated on conventional radiography, ultrasound, contrast studies, CT, MRI and radionuclide investigations		X		X				X	X		X
	Demonstrate adequate knowledge of the management of suspected non-accidental injury and the recognition of features of child abuse		X		X				X	X		X
Core skills	Reporting plain radiographs performed in the investigation of paediatric disorders including trauma		X		X					X		X
	Performing and reporting ultrasound studies in the paediatric age group	X		X	X					X		X
	Supervising and reporting cranial computed tomography studies, particularly in the setting of acute trauma		X		X					X		X
	Performing and reporting routine fluoroscopic procedures in the paediatric age group, particularly:											

	- contrast studies of the urinary tract	X			X					X		X
CORE TRAINING	**PAEDIATRIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	- contrast studies of the gastrointestinal system	X			X					X		X
Core Experience	Supervising and reporting the following investigations in the paediatric age group:											
	- computed tomography (non-cranial)		X		X					X		X
	- magnetic resonance imaging		X		X					X		X
	- radionuclide investigations		X		X					X		X
	Participation in clinicoradiological and multidisciplinary meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**PAEDIATRIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants, developmental abnormalities and relevant physiology of children		X	X	X							
	The pathological processes of both benign and malignant disease in the paediatric age group		X		X							
	The techniques of imaging used in the wide variety of pathological processes occurring in the paediatric age group including:											
	plain film radiography		X		X							
	ultrasonography	X		X	X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures	X			X							
	The indications, contraindications and complications of each imaging method		X				X					
	The principles and use of radiation dose reduction techniques		X			X	X					
	The drug dose regimes used in diagnostic procedures		X				X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of all aspects of paediatric disease		X									

ADVANCED TRAINING	**PAEDIATRIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Local, national and international imaging guidelines		X									
	The medico-legal aspects of paediatric practice		X				X					
Skills	The conduct, supervision and interpretation of all imaging techniques used in the investigation of paediatric diseases to a high professional standard including:											
	plain radiography		X		X							
	ultrasonography including Doppler studies	X		X	X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology including:		X		X							
	static and dynamic renal studies including cystography		X		X							
	musculoskeletal imaging		X		X							
	ventilation and perfusion lung scintigraphy		X		X							
	GI studies including investigation of Meckel's		X		X							
	identification of GI bleeding site		X		X							
	thyroid imaging		X		X							
	MIBG studies		X		X							
	dynamic biliary studies		X		X							
	fluoroscopic procedures including:											
	routine genitourinary investigations	X			X							
	routine gastrointestinal investigations	X			X							
	small bowel enema	X			X							

ADVANCED TRAINING	**PAEDIATRIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	reduction of intussusception	X			X	X						
	velopalatal competence and studies of phonation	X			X							
	disorders of swallowing	X			X							
	Biopsy procedures	X			X	X						
	Insertion of percutaneous nephrostomies	X			X	X						
	Joint aspiration (e.g. hip)	X			X	X						
	The drainage of collections	X			X	X						
	Obtaining accurate informed consent		X			X	X					
	Paediatric life support qualification	X										

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**THORACIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of thoracic anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the manifestations of thoracic disease as demonstrated by conventional radiography and CT		X		X				X	X		X
	Demonstrate adequate knowledge of the application of radionuclide investigations to thoracic pathology with particular reference to radionuclide lung scintigrams		X		X				X	X		X
	Demonstrate adequate knowledge of the application, risks and contraindications of the technique of image-guided biopsy of thoracic lesions		X						X			X
Core skills	Reporting of plain radiographs performed to show thoracic disease		X		X				X	X		X
	Supervising and reporting radionuclide lung scintigrams		X		X				X	X		X
	Supervising and reporting the following computed tomography examinations:											
	- CT of the thorax		X		X				X	X		X
	- high-resolution examinations		X		X				X	X		X
	- CT pulmonary angiography		X		X				X	X		X
	Drainage of pleural space collections under image guidance	X			X	X						X

CORE TRAINING	**THORACIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Experience	Observation of image-guided biopsies of lesions within the thorax	X			X	X						X
	Participation in clinicoradiological/multidisciplinary meetings		X									
	Familiarity with the applications of the following techniques:											
	- magnetic resonance imaging		X		X					X		X
	- angiography	X			X					X		X

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**THORACIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to cardiorespiratory function		X	X	X							
	The pathological processes of both benign and malignant disease involving the thorax		X		X							
	The epidemiology of lung diseases		X									
	The principles of population screening for lung cancer		X									
	The surgical techniques used in the staging and treatment of lung cancer		X									
	The techniques involved in all imaging and procedures used in evaluating and treating thoracic diseases including:											
	plain film radiography		X		X							
	ultrasonography	X		X	X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures	X			X							
	The indications, contraindications and complications of each imaging method		X			X	X					
	The principles of informed consent		X			X	XX					
	The role of multidisciplinary meetings in the management of thoracic disease		X									
	Local, national and international imaging guidelines		X									

ADVANCED TRAINING	**THORACIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Skills	The conduct, supervision and accurate interpretation of the following imaging techniques to a high professional standard:											
	plain radiography including:		X		X							
	primary care examinations		X		X							
	intensive care and high dependency unit examinations		X		X							
	thoracic trauma		X		X							
	paediatric examinations		X		X							
	ultrasonography including:											
	demonstration of thoracic wall lesions and pleural effusions	X			X							
	where appropriate, Doppler studies	X			X							
	computed tomography including:											
	the staging of bronchial carcinoma		X		X							
	identification and categorisation of diffuse lung disease		X		X							
	CT pulmonary angiography		X		X							
	the investigation of the following:											
	pleural lesions		X		X							
	thoracic wall lesions		X		X							
	pulmonary lesions		X		X							
	mediastinal lesions		X		X							
	magnetic resonance imaging where applicable		X		X							

ADVANCED TRAINING	**THORACIC RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	radionuclide radiology including:											
	ventilation/perfusion lung scintigraphy		X		X							
	The accurate localisation and biopsy of the following:											
	thoracic wall lesions	X				X						
	pleural lesions	X				X						
	pulmonary lesions	X				X						
	mediastinal lesions	X				X						
	Ultrasound guided thoracentesis	X				X						
	Chest drain insertion	X				X						
	Obtaining accurate informed consent		X			X	X					
	Intermediate life support qualification	X										

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of urinary tract anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate adequate knowledge of the manifestations of urological disease as demonstrated on conventional radiography, ultrasound, CT and MRI		X	X	X				X	X		X
	Demonstrate familiarity with the current application of radionuclide investigations for imaging the following:											
	- renal structure		X		X				X	X		X
	- renal function		X		X				X	X		X
	- vesico-ureteric reflux		X		X				X	X		X
	Demonstrate awareness of the application of angiography and vascular interventional techniques		X		X				X	X		X
Core Skills	Reporting plain radiographs performed to show urinary tract disease		X		X					X		X
	Performing and reporting the following contrast studies:											
	- intravenous urogram (even if not performed at certain training centres)		X		X					X		X
	- retrograde pyelo-ureterography	X			X					X		X

CORE TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	- loopogram	X			X					X		X
	- nephrostogram	X			X					X		X
	- ascending urethrogram	X			X					X		X
	- micturating cysto-urethrogram	X			X					X		X
	Performing and reporting transabdominal ultrasound to image the urinary tract	X		X	X					X		X
	Supervising and reporting computed tomography of the urinary tract		X		X					X		X
	Reporting radionuclide investigations of the urinary tract in the following areas:											
	- kidney		X		X					X		X
	- renal function		X		X					X		X
	- vesico-ureteric reflux		X		X					X		X
Core Experience	Observation of nephrostomies	X				X						X
	Drainage of renal abscesses and peri-renal collections	X				X						X
	Observation of percutaneous ureteric stent placement	X				X						X
	Observation of endorectal ultrasound	X										X
	Performing image-guided renal biopsy under US guidance	X				X						X
	Performing image-guided renal biopsy under CT guidance	X				X						X
	Magnetic resonance imaging applied to the urinary tract		X		X					X		X
	Experience of angiography and vascular interventional techniques	X			X	X				X		X

CORE TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Participation in clinicoradiological/ multidisciplinary meetings		X									
	Experience of antegrade pyelo-ureterography	X			X	X				X		X

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and pathophysiology relevant to urogenital system		X	X	X							
	The pathology and pathophysiology of benign and malignant conditions involving the urogenital system		X		X							
	The epidemiology of urogenital diseases		X									
	The techniques involved in all imaging and procedures used in evaluating and treating urogenital diseases including:											
	plain film radiography		X									
	ultrasonography	X			X							
	contrast studies		X		X							
	computed tomography		X		X							
	magnetic resonance		X		X							
	radionuclide radiology		X		X							
	fluoroscopic procedures	X			X							
	interventional techniques	X			X	X						
	The indications, contraindications and complications of each imaging method		X			X	X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of urogenital disease		X									
	Local, national and international imaging guidelines		X									

ADVANCED TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Skills	The conduct, supervision and accurate interpretation of the following imaging techniques to a high professional standard:											
	plain radiography including:		X		X							
	intravenous urography		X		X							
	retrograde and antegrade pyelography ileal loopography	X			X							
	cystourethrography	X			X							
	hysterosalpingography	X			X	X						
	ultrasonography including:											
	abdominal	X		X	X							
	scrotal	X			X							
	transrectal	X			X							
	transvaginal	X			X							
	Doppler studies	X			X							
	computed tomography of the urinary tract and pelvis including:											
	unenhanced CT for renal colic		X		X							
	the staging of renal and urothelial tumours		X		X							
	the staging of pelvic malignancy		X		X							
	CT-urography		X		X							
	CT-angiography		X		X							
	magnetic resonance imaging of the urinary tract and pelvic organs		X		X							
	video urodynamics	X			X							
	radionuclide radiology including:		X		X							

ADVANCED TRAINING	**URORADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	renal transplant studies		X		X							
	The safe and effective practice of the following interventional techniques:											
	renal tract access	X				X						
	biopsy of the following:											
	renal masses	X				X						
	retroperitoneal masses	X				X						
	prostate	X				X						
	drainage of collections	X				X						
	ureteric dilatation/stent insertion	X				X						
	Obtaining accurate informed consent		X			X	X					
	Intermediate life support qualification	X										
Experience	Antegrade pyelography	X			X	X						
	Renal cyst aspiration and ablation	X				X						
	Nephrolithotomy	X				X						
	Suprapubic access to the bladder	X				X						
	Transrectal prostate biopsy	X			X	X						
	Other interventional procedures e.g. PUJ procedures	X				X						
	Staging of malignant disease		X		X							

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
CORE TRAINING	**VASCULAR AND VASCULAR INTERVENTION RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Core Knowledge	Demonstrate adequate knowledge of vascular anatomy and clinical practice relevant to clinical radiology		X	X	X				X	X		X
	Demonstrate familiarity with the indications, contraindications, pre-procedure preparation (including informed consent), sedation and anaesthetic regimens, patient monitoring during procedures and post-procedure patient care		X						X			X
	Demonstrate familiarity with procedure and post-procedure complications and their management		X									X
	Demonstrate familiarity with the appropriate applications of the following techniques:											
	- ultrasound (including Doppler)	X			X				X	X		X
	- digital subtraction techniques	X			X				X	X		X
	- computed tomography and CT angiography		X		X				X	X		X
	- magnetic resonance imaging and MR angiography		X		X				X	X		X
	- intra-arterial angiography	X			X				X	X		X
Core Skills	Reporting plain film radiographs relevant to cardiovascular disease		X		X					X		X
	Performing and reporting lower limb venography (contrast medium and/or US)	X			X					X		X
	Supervising and reporting CT examinations of the vascular system (CTA) including image manipulation		X		X					X		X

CORE TRAINING	**VASCULAR AND VASCULAR INTERVENTION RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Supervising and reporting MRI examinations of the vascular system (MRA) including image manipulation		X		X					X		X
	Performing and reporting ultrasound (including Doppler):											
	- venous	X			X					X		X
	- arterial	X			X					X		X
	Participation in clinicoradiological meetings		X									

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**INTERVENTIONAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	The embryology, anatomy, normal variants and physiology of the appropriate body systems		X	X	X							
	The current interventional equipment used including:											
	percutaneous access needles and kits	X			X							
	catheters and guidewires	X			X							
	dilating devices	X			X							
	stents	X			X							
	embolisation materials	X			X							
	The full range of currently used diagnostic and therapeutic techniques		X		X							
	Specific techniques of access to and intervention within various organs and structures		X		X							
	The indications, contraindications and complications of each method		X			X	X					
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the management of interventional cases		X									
	Local, national and international imaging and interventional guidelines		X									
Skills	The conduct, supervision and interpretation of all imaging techniques to a high professional standard		X		X							

ADVANCED TRAINING	**INTERVENTIONAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	The safe and effective practice of interventional techniques in the appropriate body system(s)		X			X	X					
	Ability to make appropriate decisions about terminating a procedure for technical reasons or grounds of safety/comfort of the patient		X			X	X					
	Good communication with patients and professional colleagues			X		X	X					
	Obtaining accurate informed consent			X		X	X					
	Advanced life support qualification	X										
	Diagnostic arteriography	X			X	X						
	Percutaneous angioplasty	X				X						
	Percutaneous central venous access	X				X						
	Thrombolysis	X				X						
	IVC filter insertion	X				X						
	Embolisation	X			X	X						
	Vascular stent insertion	X				X						
	Alternative arterial access (e.g. axilla)	X				X						
	Renal tract access (e.g. nephrostomy)	X			X	X						
	Ureteric dilatation	X				X						
	Ureteric stent insertion	X				X						
	Renal biopsy	X				X						
	Renal cyst aspiration	X				X						
	Drainage of collections	X				X						
	GI dilatations	X				X						
	GI stents	X				X						
	Percutaneous gastrostomy	X				X						
	Transjugular liver biopsy	X				X						

ADVANCED TRAINING	**INTERVENTIONAL RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Plugged liver biopsy	X				X						

Curriculum area	Competence	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
ADVANCED TRAINING	**RADIONUCLIDE RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Knowledge	An in-depth understanding of computing, image processing, tracer principles and techniques, radiation biology and protection, radiopharmacy and radiochemistry in relation to the following:											
	applications to nuclear medicine data acquisition, image processing and display				X							
	appropriate mathematics and physics applied to radionuclide tracer theory, modelling of tracer kinetics and quantitative imaging											
	the kinetics of radioactive tracers used in nuclear medicine											
	the use of kinetics and modelling techniques to calculate GFR etc.											
	the physiological principles of tracer techniques											
	errors associated with quantitative measurements											
	the theory of biological effects of high and low-level radiation from unsealed sources											
	the calculation of radiation dose from radiopharmaceuticals (effective dose (ED))											
	the necessary precautions for the safe handling of radiopharmaceuticals											

ADVANCED TRAINING	**RADIONUCLIDE RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	the diagnosis and treatment of radiation exposure											
	the management of radiation accidents											
	the production of radionuclides by reactors, cyclotron and radionuclide generators											
	the properties of commonly used diagnostic radionuclides											
	the physiochemical and biological properties of different radiopharmaceuticals in routine clinical practice, clinical trials and under development											
	the principles of localisation of radiopharmaceuticals											
	different formulations used in nuclear medicine											
	cell labelling techniques											
	quality control											
	Relevant clinical and practical knowledge for each subspecialty area of practice including:											
	embryology, anatomy, normal variants, physiology and molecular biology for each body system		X		X							
	protocols for study performance and analysis											
	preparation of patients, precautions and complications		X									
	special protocols for paediatric studies		X									
	concepts of risk-benefit and cost-benefit analysis		X				X					
	The full range of radionuclide diagnostic techniques available including:											

ADVANCED TRAINING	**RADIONUCLIDE RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	the indications, contra-indications and complications		X			X	X					
	the factors affecting the choice of radiopharmaceuticals		X									
	the effects and side effects of these agents		X									
	The principles of informed consent		X			X	X					
	The role of multidisciplinary meetings in the following:		X									
	the planning of investigations and the selection of appropriate tests and imaging techniques for the diagnosis of benign and malignant disease		X			X						
	the staging of malignant disease		X			X						
	the planning and outcomes of treatment		X			X						
	the detection of errors in diagnosis and complications of treatment		X			X						
	promoting an understanding of relevant pathology		X			X						
	Local, national and international imaging guidelines		X									
	An in-depth knowledge of the legal and regulatory requirements for the practice of radionuclide radiology		X			X	X					
Skills	The conduct, supervision and interpretation to a high professional standard of all radionuclide diagnostic imaging and common non-imaging procedures in the following areas:											
	Breast		X		X							
	chest/thorax		X		X							

ADVANCED TRAINING	**RADIONUCLIDE RADIOLOGY**	DOPS	CbD	Mini-CEX	DADRS	Patient questionnaire	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	gastrointestinal		X		X							
	head and neck		X		X							
	musculoskeletal		X		X							
	neuroradiology		X		X							
	Oncology		X		X							
	paediatric imaging		X		X							
	urogenital radiology		X		X							
	Vascular		X		X							
	endocrine diseases		X		X							
	inflammatory conditions		X		X							
	Obtaining accurate informed consent		X	X		X	X					
	Intermediate life support qualification	X										
Experience	The application of radionuclide imaging in all aspects of radiological and clinical practice		X			X						
	Familiarity with the techniques of radionuclide preparation and patient delivery in radionuclide radiology	X			X				X			

Blueprint of assessment system – Good Medical Practice areas of curriculum – ST1 & ST2

Standards	GMP criterion	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
By the end of the second year of training (ST2), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
The duties of a doctor												
	an understanding of the roles and responsibilities of clinical radiologists		X			X	X					
Good Clinical Care												
	effective responses to challenge, complexity and stress in clinical radiology						X					
	basic life support skills											
	effective skills in clinical and radiological examination	X	X	X	X		X					
	effective skills in quality assessment of basic radiological investigations	X	X	X			X					
	skills in formulating an appropriate radiological differential diagnosis in a wide variety of common and emergency presentations	X	X	X	X		X					
	effective initial radiological investigation of acute clinical conditions, seeking additional advice and opinion as appropriate	X	X				X					
	knowledge, understanding and recognition of common behavioural, emotional and psychosocial aspects of illness		X				X					
	safe practical skills in radiology	X	X	X			X					

By the end of the second year of training (ST2), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	clear record-keeping and report writing	X					X					
	reliable and appropriate delivery of the results of radiological investigations to referrers	X					X					
	knowledge and skills in safe prescribing of common drugs used in radiology	X	X	X			X					
	an understanding of the role of discrepancy review sessions in maintaining standards in radiological practice		X									
	an understanding of the role of the radiologist in multidisciplinary team meetings and the importance of these meetings to clinical patient management		X				X					
Maintaining good medical practice												
	knowledge of the science-base for safe radiological practice	X	X					X	X			
	knowledge of the anatomical and pathophysiological basis for radiological signs		X		X				X			
	knowledge of common and serious clinical conditions and their radiological presentation		X		X				X			
	knowledge of the radiation dose of common radiological examinations, relative risk factors and the concept of risk vs. benefit in radiological investigation		X					X	X			
	knowledge of the doses of the different contrast used in radiological practice and the risks associated with the use of contrast		X						X			
	an understanding of the principles of radiological screening for disease and its risks		X						X			
	an understanding of an evidence-based approach to radiological practice		X									

By the end of the second year of training (ST2), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	an understanding of clinical governance activities and audit in radiological practice		X									
	a reflective approach to improvement of professional practice as a radiologist		X				X					
	an understanding of equality and diversity in radiological practice					X	X					
	knowledge of the legal framework within which radiology is practised		X					X	X			
	an understanding of the extent and limitations of their own skills and the need to work within those limitations	X	X	X			X					
Teaching and training, appraising and assessing												
	an understanding of effective teaching in radiology						X					
	a positive approach to receiving mentoring and educational supervision						X					
	an understanding of the need for an ethical and rigorous approach to research in radiology						X					
Relationships with patients												
	an understanding of effective communication and interpersonal skills with patients			X		X	X					
	empathy, sensitivity and skills in engaging the trust of and consent from patients			X		X	X					
	understanding of listening skills and basic skills in giving information and advice to patients			X		X	X					

By the end of the second year of training (ST2), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Working with colleagues												
	effective communication and interpersonal skills with colleagues						X					
	professional respect for the contribution of colleagues in a range of roles in radiological practice						X					
	effective time-management skills						X					
	an understanding of the effects of local, national and international policies on their work and working environment		X				X					
Probity												
	sound ethical personal and professional practice						X					
	reliability and responsibility in ensuring their accessibility to colleagues, clinicians and patients						X					
	an understanding of the role of the radiologist as an advocate of the patient		X				X					
	respect for patient confidentiality		X				X					
	an understanding of the responsibility of a radiologist when colleagues are failing in their duties as a doctor and what steps should be taken to rectify the situation		X									
Health												
	an understanding of the importance of self-awareness						X					
	a responsible approach to personal health, stress and wellbeing						X					

Blueprint of assessment system – Good Medical Practice areas of curriculum – by the end of ST3

Standards	GMP criterion	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
By the end of the third year of training (ST3), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
The duties of a doctor												
	a commitment in their practice to the roles and responsibilities of clinical radiologists						X					
Good Clinical Care												
	increasing confidence, credibility and independence in response to challenge and stress in clinical radiology		X	X			X					
	basic, and intermediate or advanced life support skills where required											
	improving skills in clinical and radiological examination	X	X	X	X		X					
	improving skills in quality assessment of all radiological investigations	X	X	X			X					
	improving skills in formulating an appropriate radiological differential diagnosis in a wide variety of clinical presentations	X	X	X	X		X					
	responsibility for the effective initial radiological investigation of acute clinical conditions, seeking additional advice and opinion as appropriate	X	X		X		X					
	effective skills in responding to behavioural, emotional and psychosocial aspects of illness		X				X					

By the end of the third year of training (ST3), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	safe practical skills in diagnostic and interventional radiology	X	X	X			X					
	improving skills in written communication and report writing		X				X					
	increasing responsibility for the reliable and appropriate delivery of radiological results to referrers	X					X					
	a commitment to safe prescribing of drugs and contrast used in radiology and provision of advice to others on safe prescribing	X	X	X			X					
	an increasing commitment to the organisation of discrepancy review sessions	X					X					
	an increasing commitment in their practice in attending and participating in multidisciplinary team meetings	X					X					
Maintaining good medical practice												
	sound knowledge of the science-base for safe radiological practice	X	X	X			X		X			X
	sound knowledge of the anatomical and pathophysiological basis for radiological signs		X		X		X		X	X	X	X
	extended knowledge of common and serious clinical conditions and their radiological presentation		X		X				X	X	X	X
	effective skills in selecting the appropriate radiological investigation based on knowledge of relative risk factors and risk vs. benefit in different radiological investigation		X				X		X			X
	effective skills in the selection of appropriate contrast and dose for all general radiological procedures	X	X	X			X		X			X

By the end of the third year of training (ST3), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	an increasing commitment to applying the principles of radiological screening in their radiological practice		X						X			
	application, development and refinement of evidence-based guidelines to radiological practice		X									
	participation in clinical governance activities and audit in radiological practice		X				X					
	a commitment to reflective practice and continuing improvement of professional practice as a radiologist						X					
	a commitment to an open-minded approach to equality and diversity in radiological practice					X	X					
	improving knowledge of the law regarding data protection, confidentiality and consent		X						X			
	a commitment to practise within the limitations of their own skills and experience		X	X			X					
Teaching and training, appraising and assessing												
	skills in effective teaching in radiology						X					
	a commitment to acting on advice from mentoring and educational supervision						X					
	an understanding of research methods and a commitment to involvement in journal club and other research review sessions						X					
Relationships with patients												
	a commitment to effective communication and interpersonal skills with patients			X		X	X					

By the end of the third year of training (ST3), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	improving skills in gaining the trust of and consent from patients			X		X	X					
	Increasing confidence in giving information and advice to patients			X		X	X					
Working with colleagues												
	skills in building and maintaining effective relationships with and between colleagues			X			X					
	increasing confidence in team-work and the ability to collaborate across clinical specialties in the investigation and treatment of patients			X			X					
	effective management skills in clinical and non-clinical settings						X					
	experience and increased understanding of the effects of local, national and international policies on their work and working environment		X				X					
Probity												
	sound ethical personal and professional practice		X				X					
	increasing reliability and responsibility in ensuring their accessibility to colleagues, clinicians and patients						X					
	incorporation of the role of the radiologist as an advocate of the patient into routine clinical practice		X			X	X					
	respect for patient confidentiality in routine clinical practice		X			X	X					
	increased understanding of the local and national procedures for dealing with failing colleagues		X									

By the end of the third year of training (ST3), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
Health												
	a consistently responsible approach to personal health, stress and well-being						X					

Blueprint of assessment system – Good Medical Practice areas of curriculum – by end of ST5

Standards	GMP criterion	Workplace based assessment						Examinations				
								First FRCR	Final FRCR Part A	Final FRCR Part B	Final FRCR Part B	Final FRCR Part B
By the end of the fifth year of training (ST5), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
The duties of a doctor												
	a commitment in their practice to advocate for the patient within the constraints of the legal and financial framework within which they practise		X	X			X					
Good Clinical Care												
	responsibility for an effective response to complex challenges and stress in clinical radiology		X	X			X					
	effective responses to complications in radiological procedures and life-threatening situations						X					
	a commitment to focussed and analytical clinical and complex radiological examinations	X	X	X	X		X					
	a commitment to focussed and analytical assessment of all radiological investigations	X	X	X	X		X					
	effective analytical skills in formulating an appropriate radiological diagnosis in a wide variety of complex clinical presentations	X	X	X	X		X					
	leadership skills in the management of the radiological investigation of common and complex clinical conditions, seeking additional advice and opinion as appropriate	X	X	X			X					

By the end of the fifth year of training (ST5), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	effective skills in ensuring the management of behavioural, emotional and psychosocial aspects of illness		X				X					
	expertise and safe practice in a range of diagnostic and interventional procedures	X	X	X	X		X					
	effective skills in written communication and report writing		X				X					
	responsibility for the reliable and appropriate delivery of radiological results to referrers		X				X					
	responsibility for safe prescribing of drugs and contrast used in radiology and provision of advice to others on safe prescribing	X	X				X					
	effective leadership skills in the organisation of discrepancy review sessions	X					X					
	effective leadership skills in the organisation of and contribution to multidisciplinary team meetings	X					X					
Maintaining good medical practice												
	detailed up-to-date knowledge of the science-base for general and specific special interest radiological practice		X	X			X					
	detailed knowledge of the anatomical and pathophysiological basis for radiological signs		X		X		X					
	detailed and up-to-date knowledge of common and serious clinical conditions and their radiological presentation, particularly in the chosen special interest areas		X		X		X					
	effective skills in selecting the appropriate radiological investigations for general and chosen special interest areas		X	X			X					

By the end of the fifth year of training (ST5), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	effective skills in the selection of appropriate contrast and dose for all general and special interest radiological procedures		X	X			X					
	effective skills in radiological screening for specific diseases in the chosen areas of special interest		X	X								
	independent thinking to enable them to challenge guidelines and procedures in radiological practice		X				X					
	the application of risk assessment strategies through active involvement in the development, evaluation and implementation of clinical governance activities in radiological practice		X				X					
	effective skills to maintain and develop the knowledge and skills required of a radiologist						X					
	responsibility for ensuring an open-minded approach to equality and diversity in radiological practice and radiology teams					X	X					
	detailed knowledge of the law regarding data protection, confidentiality and consent		X				X					
	responsibility for practising within the limitations of their own skills and experience		X	X			X					
Teaching and training, appraising and assessing												
	a commitment to effective teaching and training of colleagues working in different contexts within a radiology department						X					
	effective skills in training and supervision of junior colleagues and others working in a radiology department						X					

By the end of the fifth year of training (ST5), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	an effective and analytical approach to the review of research papers and where appropriate the application of complex research methods						X					
Relationships with patients												
	effective strategies to communicate with patients and encourage their participation in management of their clinical problems			X		X	X					
	effective skills in conveying and discussing difficult information and obtaining informed consent from patients for complex radiological procedures			X		X	X					
	effective skills in giving information and advice to patients in common and complex cases			X		X	X					
Working with colleagues												
	positive and constructive relationships within radiological and clinical teams			X			X					
	a commitment to effective multi-specialty team work in the investigation and treatment of patients with complex disorders			X			X					
	effective management skills in support of effective service provision						X					
	effective skills in promoting the use of local, national and international policies and organisations involved in radiological practice						X					
Probity												
	exemplary ethical personal and professional practice sufficient to act as a role model for others		X				X					

By the end of the fifth year of training (ST5), trainees will demonstrate:		DOPS	CbD	Mini-CEX	DADRS	Patient questionnaires	MSF	*MCQ*	*MCQ*	*Reporting*	*Rapid reporting*	*Oral*
	Responsibility for ensuring their own and others' reliability and accessibility in the radiological team						X					
	incorporation of the role of the radiologist as an advocate of the patient into routine clinical practice		X				X					
	effective skills in maintaining patient confidentiality in routine clinical practice		X				X					
	detailed knowledge of the local and national procedures for dealing with failing colleagues		X									
Health												
	effective skills in ensuring their own responsible approach to personal health, stress and well-being and that of others						X					